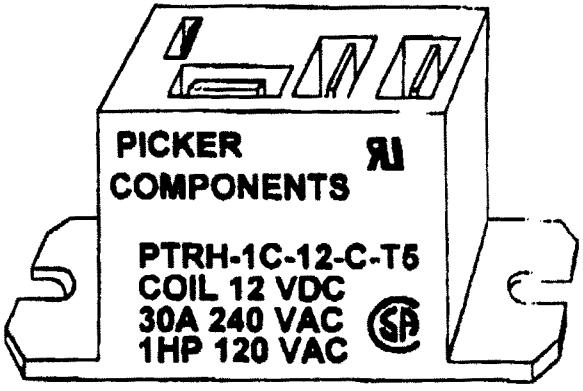
# PTRH-T SERIES RELAYS

**BIG POWER IN A SMALL PACKAGE
IDEAL FOR USE IN APPLIANCE
CONTROLS, ALARM SYSTEMS,
EMERGENCY LIGHTING SYSTEMS,
AND HVAC CONTROLS**




## FEATURES

- HIGH RELIABILITY
- SMALL SIZE (APPROXIMATELY 1 CU. IN.)
- UP TO 30 AMP RATING
- UP TO 1 HP MOTOR LOAD
- HIGH DIELECTRIC STRENGTH
- MEETS UL 508 & 873 SPACING
- UL AND CSA RECOGNIZED
- AVAILABLE COMPLETELY SEALED WITH LOAD TERMINALS ON TOP
- ALSO AVAILABLE WITH COIL TERMINALS ON TOP FOR CHASSIS MOUNTING

## SPECIFICATIONS

### CONTACT DATA

| | |
|---|---|
| ARRANGEMENT | 1 FORM A, B, OR C (SPST-NO, SPST-NC OR SPDT) |
| MATERIAL | SILVER CAD OXIDE |
| MAX CONTACT VOLTAGE | 250VAC OR 30VDC |
| LIFE | MECHANICAL $10 \times 10^6$ ELECTRICAL $10 \times 10^4$ |
| RATINGS | 30A, 120VAC/240VAC, 30A 30VDC, 1 HP 120VAC/240VAC |

### COIL DATA

| | |
|---|---|
| VOLTAGES | 5 VDC TO 48 VDC |
| POWER | .9 W NOMINAL |

### GENERAL DATA

| | |
|---|---|
| CONTACT RESISTANCE | 50 MILLIOHMS MAX |
| OPERATE TIME | 15 MILLISECONDS MAX |
| RELEASE TIME | 10 MILLISECONDS MAX |
| INSULATION RESISTANCE | GREATER THAN 100 MEGOHMS @ 500 VDC |
| DIELECTRIC STRENGTH | 1500 VAC BETWEEN OPEN CONTACTS<br>2000 VAC BETWEEN CONTACTS AND COIL |
| VIBRATION | 1.0 MM AMPLITUDE, 10 TO 55 HZ |
| SHOCK | $100 M/SEC^2$ ( APPROX 10G's) |
| TEMPERATURE RANGE | -55 DEGREES C to 85 DEGREES C |
| WEIGHT | 30 GRAMS |

## ORDERING INFORMATION

| FTRH | - 1C | - 12 | - S | - T2 |
|---|---|---|---|---|
| A | B | C | D | E |

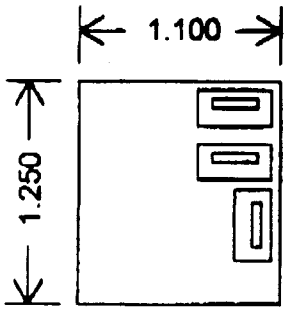
A — STANDARD MODEL NUMBER
B — CONTACT CONFIGURATION
C — COIL VOLTAGE
D — SEALED ( FOR UNSEALED USE LETTER C)
E — TOP TERMINALS (T2-1A, T3-1C, T4-1A+COIL, T5-1C+COIL)

### COIL DATA

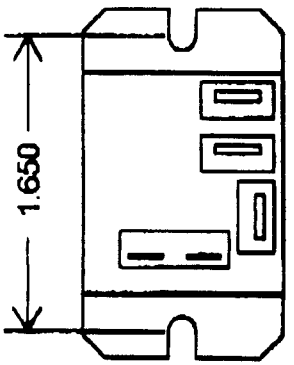
| NOMINAL COIL VOLTAGE | COIL RESISTANCE IN OHMS, ± 10% AT 25 DEGREES C | MUST OPERATE VOLTAGE AT 25 DEGREES C | MUST RELEASE VOLTAGE AT 25 DEGREES C | MAXIMUM CONTINUOUS VOLTAGE |
|---|---|---|---|---|
| 5 VDC<br>6 VDC<br>9 VDC<br>12 VDC<br>18 VDC<br>24 VDC<br>48 VDC | 27<br>40<br>87<br>155<br>350<br>600<br>2560 | 75% OF RATED VOLTAGE | 10% OF RATED VOLTAGE | 110% OF RATED VOLTAGE |

TOP VIEW

DIMENSIONS IN INCHES

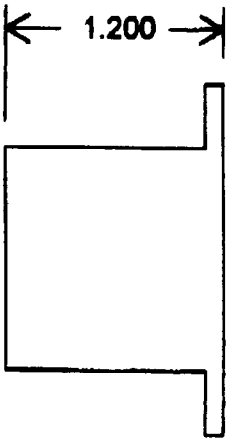



PC PINS FOR COIL



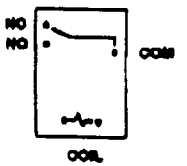

.187 MALE TERM. FOR COIL

SIDE VIEW

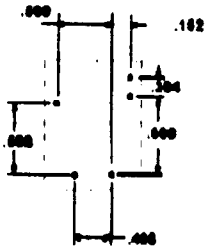



PIN LAYOUT

BOTTOM VIEW




PC BOARD LAYOUT




COIL TERM. .044 DIA
ALL OTHERS .094 DIA

### REMARKS

- CUT OFF NIB ON TOP OF RELAY AFTER FLOW SOLDERING AND CLEANING TO ALLOW RELAY TO BREATH
- CLEAN WITH WATER, FREON OR ALCOHOL ONLY